

REMARKS

Claims 1-23 are currently pending. Claims 20-23 have been allowed. Claims 5, 7, 8, 10, and 15-18 were indicated as allowable if rewritten in independent form. A clean copy of all claims is attached as Appendix A for the convenience of the Examiner.

Rejection under 35 U.S.C. § 101

The Examiner rejects claims 1, 4 and 5 under 35 U.S.C. § 101 for reciting a method that can be performed by a person, as a mental step or using pencil and paper. Claim 1 has been amended to recite a step of determining electronically the number of MCU ports. Applicant submits that claim 1 as amended clearly does not recite a method that can be performed by a person, as a mental step or using pencil and paper. Accordingly, Applicant respectfully requests that the rejection of claim 1 under 35 U.S.C. § 101 be withdrawn.

Claim Objection

Claim 1 is objected to for reciting "the maximum MCU ports" without antecedent basis. Claim 1 has been amended to delete the phrase.

The Examiner contends that claims 2-3 are confusing for reciting the allocation request originates in either a plurality of MCUs or a common channel signaling interface. Claims 2-3 have been amended to recite the allocation request is transmitted through a plurality of MCUs or a common channel signaling interface (see page 8, lines 13-17).

The Examiner contends that the method steps recited in lines 11-14 of claim 9 are independent of whether the multipoint network event can be started or not. Claim 9 has been amended to recite those method steps as contingent to a determination that the multipoint network event can be started.

Rejections under 35 U.S.C. § 102

Claim 9 is rejected under 35 U.S.C. § 102(b) as being anticipated by Biggs et al. (U.S. Patent No. 5,625,407). The rejection is respectfully traversed.

Claim 9 is drawn to a method of allocating resources for a multipoint network event, comprising the calculation of $R = [(R_{MAX})(R_{SP})]_{R_{SM}}$, where R = said number of resources to start, R_{MAX} = maximum resources, R_{SP} = configurable start resource percentage, and R_{SM} = configurable minimum start resources. Biggs et al. teach a multimedia bridging system that utilizes an improved multipoint control unit and endpoint devices. Biggs et al., however, do not teach or suggest an allocation method comprising the calculation claimed herein. Hence, Biggs et al. do not anticipate claim 9 because Biggs et al. do not teach or suggest each and every aspect of the present invention. Accordingly, Applicant respectfully requests that the rejection of claim 9 under 35 U.S.C. § 102(b) be withdrawn.

Rejections of claims 1-4 and 11-13 under 35 U.S.C. § 103

Claims 1-4 and 11-13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Biggs et al. (U.S. Patent No. 5,625,407), further in view of Official Notice. The rejection is respectfully traversed.

Claim 1 is drawn to a method for allocating MCU ports for a multipoint network event. The method comprises receiving an allocation request comprising a maximum number of MCU ports for the multipoint network event; and determining the number of MCU ports to allocate at the start of the multipoint network event, wherein said determination involves calculation comprising said maximum number of MCU ports and the allocated MCU port number is less than or equal to said maximum number of MCU ports.

Biggs et al. disclose methods for implementing a multimedia conference (Figures 8-11). In one embodiment, a first endpoint establishes a link to a second endpoint and

transmits a network address to the second endpoint. Subsequently, the communication link between the two endpoints is broken, and new links are established between each endpoint and a multimedia server on a network (col. 3, ll. 2-23). In another embodiment, a first endpoint contacts a multimedia server, informing the server of network addresses corresponding to endpoint devices that will be connected to the conference. Then the multimedia server establishes communication links to these endpoints according to these network addresses (col. 3, ll. 29-37). Hence, Biggs et al. only teach implementing a multimedia conference by establishing communication links between endpoints and/or a multimedia server. Biggs et al. do not teach or suggest a method that involves receiving an allocation request for a multipoint network event, said request comprises a maximum number of MCU ports for the multipoint network event.

Furthermore, Biggs et al. do not teach or suggest allocation of MCU ports. Biggs et al. only teach a multimedia server reservation system that can confirm the availability of multimedia server resources by checking against a database of previous multimedia server reservation (col. 16, ll. 13-17; see also col. 19, ll. 13-23). Thus, Biggs et al. teach a system that can check and confirm the availability of multimedia server resources before a multimedia conference is started; Biggs et al. do not teach or suggest allocating MCU ports at the start of a multipoint network event after receiving an allocation request as claimed herein (see page 7, ll. 10-14), wherein the number of allocated MCU ports is less than or equal to the maximum MCU ports number stated in the allocation request.

The Examiner uses Official Notice to assert that it is a well-known practice not to assign resource amount more than what is being requested. Applicant submits that the Official Notice does not teach or suggest allocating MCU ports based on calculation comprising a requested maximum number of MCU ports for a multipoint network event as claimed herein. The Official Notice defines "resource allocation" as "the assignment of physical resources to virtual resources such that the virtual resource requirements are satisfied", and notes that allocation to an ad-hoc or unreserved event occurs on a capacity-permitting basis. The Official Notice, however, does not provide any teaching or

suggestion with regard to allocating MCU ports based on calculation comprising a maximum number of MCU ports as disclosed herein.

In view of the above remarks, Applicant submits that Biggs et al. together with the Official Notice do not teach or suggest a method of allocating MCU ports, comprising the steps of receiving an allocation request comprising a maximum number of MCU ports for a multipoint network event; and determining the number of MCU ports to allocate at the start of the multipoint network event, wherein said determination involves calculation comprising said maximum number of MCU ports and the allocated MCU port number is less than or equal to said maximum number of MCU ports. Accordingly, Applicant respectfully requests that the rejection of claims 1-4 under 35 U.S.C. § 103(a) be withdrawn.

With regard to claims 11-13, these claims are dependent from claim 9. As discussed above, claim 9 is drawn to a method of allocating resources for a multipoint network event, comprising the calculation of $R = [(R_{MAX})(R_{SV})]_{R_{SV}}$, and Biggs et al. do not teach or suggest an allocation method comprising such calculation. Hence, Biggs et al. together with the Official Notice do not render claim 9 (and its dependent claims 11-13) obvious because the combined teaching of the cited references does not teach all of the limitation of claim 9. Accordingly, Applicant respectfully requests that the rejection of claims 11-13 under 35 U.S.C. § 103(a) be withdrawn.

Rejections of claims 6, 14 and 19 under 35 U.S.C. § 103

Claims 6, 14, and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Biggs et al. (U.S. Patent No. 5,625,407), further in view of Yang et al. (U.S. Patent No. 6,192,243). The rejection is respectfully traversed.

Claim 6 is drawn to a method of time varying allocation of MCU ports during a multipoint network event, comprising dynamically adjusting the number of allocated MCU ports based on users actually in the multipoint network event and based on a statistics

algorithm using probability values related to future or historical use of MCU ports, wherein the probability values are dynamically modified.

Biggs et al. has been discussed above. Yang et al. teach algorithm that provides optimum number of guard channels for any given cell in a cellular communications network by periodically measuring mobility and call traffic load parameters within that cell. (col. 2, line 57 to col. 3, line 10; see also Abstract). The Examiner contends that it would have been obvious to combine the teachings of Biggs et al. and Yang et al. because Yang's time-varying modeling based on pre-selected time intervals would make Biggs' resource allocation method dynamically reflecting the true usage of resources for the entire event. Applicant respectfully traverses.

To establish a prima facie case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. See MPEP § 2143. Applicant submits that Yang does not provide any suggestion or motivation to modify the reference or to combine reference teaching. Yang simply does not disclose or envision any use related to multipoint control unit (MCU) as that term is properly construed, but instead deals with a network of point-to-point connections, not multipoint network event as claimed herein. Applicant submits that the Examiner has not provided any suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

Moreover, even if the combination of Biggs and Yang is assumed to be proper, the combination does not disclose or suggest all of the limitations of claim 6. Applicant submits that the combined references do not teach or suggest dynamically adjusting the number of allocated MCU ports based on a statistics algorithm using probability values that are dynamically modified. The present specification teaches a time-varying resource allocation algorithm supported by a statistical modeling table comprising probability

values for each modeling interval. These probability values represent the probabilities that an event participant will arrive to consume one of the allocated MCU ports during the next modeling interval (page 12, line 27 to page 13, line 7). In contrast, Yang et al. only teach periodically measuring mobility and call traffic load parameters within a given cell in a cellular communication network. Yang et al. do not teach or suggest a statistics algorithm comprising probability values that are dynamically modified as claimed herein.

In view of the above remarks, Applicant submits that the Examiner's purported combination of Biggs in view of Yang does not render claim 6 unpatentable for obviousness because the combination does not disclose or suggest all of the limitations of the claim. See MPEP § 2143.03. Accordingly, Applicant respectfully requests that the rejection of claim 6 under 35 U.S.C. § 103(a) be withdrawn.

Similarly, claims 14 and 19 both recite dynamically adjusting the number of allocated MCU ports or resources based on a statistics algorithm using probability values that are dynamically modified. As discussed above with regard to claim 6, Applicant submits that the Examiner's purported combination of Biggs in view of Yang does not render claims 14 and 19 unpatentable for obviousness because the combination does not disclose or suggest all of the limitations of the claims. Accordingly, Applicant respectfully requests that the rejection of claims 14 and 19 under 35 U.S.C. § 103(a) be withdrawn.

Applicant submits that the claims are now in condition for allowance. Should the Examiner have any questions or concerns that can be addressed via telephone, the Examiner is requested to contact Applicant's attorney Terri G. Lewis at 832-446-2422.

Respectfully submitted,



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